

## **ABSTRACT OF THE DISCLOSURE**

### **APPARATUS AND METHOD FOR DETECTING PHOTON EMISSIONS FROM TRANSISTORS**

A system, apparatus, and method for analyzing photon emission data to  
5 discriminate between photons emitted by transistors and photons emitted by  
background sources. The analysis involves processing of integrated circuit computer  
aided design data to identify transistors within the CAD data. The analysis may  
further involve the use of Boolean operators to process the CAD data to particularly  
identify, such as through a channel, the location of the NMOS and PMOS gates, the  
10 location of the drain and source, or some combination of the location of the gate and  
drain or source to particularly identify the pinch-off region.